C/007/039 Incoming
cc: Steve C. &
Amanda

State of Utah
GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

March 28, 2012

Mr. Erwin Sass, General Manager
Dugout Canyon Mine
P.O. Box 1029
Wellington, Utah 84542

Dear Mr. Sass:

Subject: Canyon Fuel Company, Dugout Canyon Mine, Regarding Potential Future Non-compliance at Outfall 005 of UPDES Permit No. UT0025593

A number of meetings, letters and ideas have been exchanged over the last couple of years regarding the discharge at Outfall 005. In addition, mine conditions have been changing over time. The purpose of this letter is to update and clarify our position as to how the issues regarding discharge of water from Outfall 005 may be addressed as follows:.

1. Do nothing. This may be feasible if there is not a need to discharge from the mine in the future, or if any effluent is discharged in compliance with the permit effluent limits. If effluent is discharged and is not in compliance with permit effluent limits, the mine would be subject to formal enforcement action. The time frame for an enforcement action would be that identified in *40 CFR 125.43 Appendix I (e.g. normal QNCR timelines).*

2. Execute a Stipulation and Consent Order. A stipulation and consent order could be executed now, which could allow the mine to build and begin operation of some type of treatment system, with a known penalty schedule to be in-effect during a non-complying discharge. To minimize the period of non-compliance, the design of such a system should have been completed during the time period previous to the discharge date. Once the discharge begins, only the time period for equipment acquisition, construction and start-up would be required to bring the discharge into compliance. A compliance schedule with hard milestones to insure progress reflecting this strategy would be included in the stipulation and consent order. Non-compliance with the stipulation and consent order (e.g. failing to meet a milestone date etc.) would invoke pre-determined penalties included in the order.

3. Petition to modify the present UPDES permit. The mine can request a permit modification of the effluent limit(s) for the parameter(s) which pose non- compliance problems. Our discussions have focused on iron and TDS as the parameters of concern. The mine has indicated that it would be feasible to treat the effluent to comply with the existing iron (Fe) concentration effluent limit. Thus total dissolved solids (TDS) would appear to be the one remaining contaminant which would exceed its effluent limit in a possible future discharge. Please note there is no guarantee that this approach will be successful until the

following analyses are completed.

In this situation, the Division could embark on a process to investigate if it may be feasible to relax the TDS limit. The following processes would need to be completed for us to modify the TDS limit in your permit.

- A wasteload allocation (WLA) must be completed, which would allow an increase in your TDS limit to 3000 mg/L. Please see the attached memorandum which addresses that issue.

- If the effluent limit resulting from the WLA represents a lowering of the quality in the effluent (i.e. a higher contaminant effluent limit), in accordance with *UAC R317-1-6*, an Antidegredation (ADR) Level II review would need to be prepared and submitted by Canyon Fuel Company. The ADR would have to demonstrate that, based upon technical feasibility and socio-economic considerations, the lowered quality of effluent is justified in accord with ADR rules.

In the interest of reaching an expedient resolution to the mine's discharge issues we would request that you consider which of the above, or other feasible options, the mine would like to pursue. We then request that, as soon as you are able to make the determination if a discharge will be necessary and what option you would prefer to pursue, you formally respond, indicating the option and a proposed strategy and schedule to achieve a permanent resolution.

Please let us know if there is anything further that we can do to assist you in reaching full compliance. If you have any questions please contact Mike Herkimer of my staff at 801-536-4386 or mherkimer@utah.gov. If Mike is not available, please contact me at 801-536-4300.

Sincerely,

John Kennington, P.E., Manager
UPDES Engineering Section

JK:MDH:fb

Attachment

cc: Stephanie Gieck, EPA Region VIII
Daron Haddock, DOGM

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MEMORANDUM

TO: Mike Herkimer

FROM: Nicholas von Stackelberg, P.E.

DATE: 2/15/2012

SUBJECT: Canyon Fuels Dugout Mine
TDS WLA for Pace Canyon Outfall

The purpose of this memorandum is to summarize the findings of the wasteload allocation for the discharge of TDS from Canyon Fuel's Dugout Mine.

Pace Canyon Outfall 005 discharges to Pace Creek, which is tributary to Dugout Creek, which flows into Grassy Trail Creek, which flows into the Price River. A site specific standard for TDS of 3,000 mg/L applies to the Price River and tributaries from the confluence of the Green River to confluence with Coal Creek per UAC R317-2-14. A TMDL with the site specific standard of 3,000 mg/L has not been completed. The mine discharge will constitute the entire flow in Pace Creek during critical conditions. Therefore, the TDS concentration from the mine cannot exceed 3,000 mg/L in order to meet water quality standards in the receiving water.

Limiting Assumptions

1. The mine discharge will flow over Mancos Shale for approximately 27.4 kilometers of stream length as it drains through Pace Creek, Dugout Creek, and Grassy Trail Creek to the Price River. It was assumed that the potential increase in TDS concentration due to dissolution of instream solids is negligible compared to the background and anthropogenic sources (Kenney et al. 2009, MFG Inc. 2004).
2. The mine discharge will not be detained in Clark Valley Reservoir or other impoundment that has the potential to concentrate the TDS beyond 3,000 mg/L.

References

Kenney, T.A., Gerner, S.J., Buto, S.G., and Spangler, L.E. 2009. Spatially referenced statistical assessment of dissolved-solids load sources and transport in streams of the Upper Colorado River Basin: U.S. Geological Survey Scientific Investigations Report 2009-5007. 50 p. Available at *http://pubs.usgs.gov/sir/2009/5007*.

MFG Inc. 2004. Price River, San Rafael River, and Muddy Creek TMDLs for Total Dissolved Solids. Utah Department of Environmental Quality, Division of Water Quality. Available at *http://www.waterquality.utah.gov/TMDL/West_Colorado_TMDL.pdf*